Department of
Environmental Protection

Bureau of Land & Water Quality Jan. 1999

Draft Utilization Regulations

Since 1985, land application of sewage sludge and other residuals has been regulated under 06-096 CMR Chapter 567. Last April the Department initiated formal rulemaking to replace Chapter 567 with new rules, Chapter 419. However, the Department abandoned that formal rulemaking process in July of 1998.

A new informal draft of Chapter 419, dated 1/5/99 is being released for informal discussion. The Department is also holding an informal workshop to discuss these proposed changes on January 25, 1999, beginning at 9:00 at:

The Pinetree State Arboretum
Downstairs Conference Room
153 Hospital Street
Augusta, Maine
207-621-0031

(Call 287-7676 if you have questions about whether the workshop is cancelled due to storm events).

This will be the final informal workshop prior to re-starting the formal rule making process. Following this workshop, you will be notified when the formal rulemaking process begins and notified of the formal public hearing date.

If you wish to attend the workshop, please send in the following registration. The workshop is free and open to all interested parties.

Yes, I will be at the informal rulemaking workshop.

Name(s):_____
_____
_____
Company:_____
_____
_____
Address:_____
_____
_____

Phone number:_____

e-mail address:_____
_____

Mail to:

Attn David Wright
SWFR, DEP
17 SHS
Augusta, ME 04333

david.w.wright@state.me.us
Fax: 207-287-7826
Phone: 207-287-7676

EPA Year 2000 Water Fact Sheet

WHAT is the problem? Most people have heard that a major computer problem is on the horizon for January 1, 2000. The issue is called Year 2000, Y2K, or the "Millennium Bug." Many computerized functions require recognition of a specific year, day and time, but most computers and computerized equipment recognize only the last two digits of a year's date.

Therefore, when the calendar changes to the year 2000, many computers and equipment with embedded computer chips will have difficulty interpreting the correct date: they may interpret the year to be 1900 or some other year. A number of things are likely to happen: some computers and equipment will "crash"; others will operate erroneously; others may simply stop and need to be restarted; some may create data that looks correct but in reality contains errors; and some may continue to operate correctly.

WHY is the Environmental Protection Agency (EPA) concerned? As part of its mission to protect public health and the environment EPA helps assure safe and clean water for all Americans by setting water quality standards for the nation's drinking water and wastewater treatment plants. These plants are owned and operated by local government or private utility companies. Many of these plants operate with some level of computerization. Thus, monitoring, operations and maintenance, communication, laboratory analysis and reporting are areas that should be assessed for potential Year 2000 computer-related problems that could ultimately lead to public health and environmental problems.

It is important that utilities that have not already done so make any necessary changes and develop contingency plans that allow for "business as usual" on January 1, 2000.

WHEN is action needed? Time is running short. Action is required now. Drinking water and wastewater treatment plant owners and operators are, or should be, aggressively acting now to protect their systems from "Millenium Bug" caused failures on January 1, 2000.

HOW should a utility address this problem? EPA recommends a six-step approach to help ensure normal operations on January 1, 2000. These steps are:

AWARENESS – As soon As Possible

First, owners and operators of drinking water and wastewater treatment plants need to be aware that the problem is pending. There are numerous articles, newsletters, trade conferences and websites that address this issue. EPA's Y2K Water Sector Website address is www.epa.gov/year2000/ow.htm. It provides basic information as well as links to many other useful websites.

ASSESSMENT – As Soon As Possible

Owners and operators should locate and list all computerized equipment and equipment with embedded computer chips in their systems and determine which are vulnerable. They can refer to equipment owner's manuals and

equipment manufacturers, plus a general EPA checklist of potential trouble spots, available at the website noted above.

Owners and operators should also meet with representatives of service and supply chain providers such as power and telecommunications utilities, pretreatment providers and chemical companies to ascertain their readiness and the degree of risk posed by the possible external Y2K failures. In addition, power and telecommunications utilities should be urged to restore service to drinking water and wastewater utilities at equally high priorities in their emergency contingency plans.

CORRECTION – by 6/30/99

Correction can involve modification, repair or replacement of systems or components. There are diagnostic programs available as well as consulting firms and computer specialists that can assist in making the necessary corrections. Some of this information is also available on Year 2000 websites.

CONTINGENCY PLAN – Draft by 6/20/99; Final by 9/30/99

As a backup measure, all systems should have a contingency plan to deal with unforeseen problems and emergencies, including possible external service and supply failures. Among other things, These plans should address how systems would be manually operated until the computerization problems are resolved. These plans should be developed simultaneously with the correction phase, and revised after the testing/validation phase.

TESTING/VALIDATION – by 7/31/99

Running tests on the system to make sure the corrections fixed the problem is the next step. These tests should be run as soon as possible after assessment and correction in case additional changes need to be made. Independent verification of the test may be appropriate in some cases. Testing should be completed in accordance with EPA's Y2K Enforcement Policy (see www.epa.gov/year200/finalpol.htm).

IMPLEMENTATION – by 9/30/99

Once the systems are readjusted to operate correctly, they should be retested and revalidated. Then they are ready for implementation.

WHERE is help available?

In addition to the EPA Year 2000 website (www.epa.gov/year2000/ow.htm), information and assistance may be available from trade and professional associations, Journals and websites. The manufacturers and industry experts can provide advice on specific systems. You can also write to EPA Office of Water (4204), 401 m St., SW, Washington, DC 20460 to request copies of this fact sheet, other written materials and additional information.

Sodium Hypochlorite and Risk Management Planning under Section 112 (r) of the Clean Air Act

This is to clarify the applicability of Section 112 (r) of the Clean Air Act to treatment plants that use sodium hypochlorite.

The federal EPA has promulgated rules under Section 112 (r) that require facilities that store any of a list of 137 chemicals, over certain quantities, to develop risk management plans. Chlorine (CAS # 7782-50-5) is one of the chemicals. The threshold quantity is 2,500 pounds. Section 112 (r) does not specify what form of chlorine is subject to the rule, however an EPA question and answer document clarifies that chlorine is subject regardless of physical state.

Recently there have been questions raised on the applicability of Section 112 (r) to treatment plants that use sodium hypochlorite (CAS# 7681-52-9). Chlorine typically constitutes 12-15% by weight of the constituents of the sodium hypochlorite used in treatment plants.

I have discussed this issue with David Oberhauser of EPA Region I. EPA Region I has determined that since the chlorine is present as an integral part of the molecule, not as elemental chlorine in the gaseous or liquid phase, and that sodium hypochlorite is a substance with distinct physical and chemical properties from gaseous or liquid chlorine, sodium hypochlorite is not subject to Section 112 (r).

This reverses an earlier preliminary interpretation of this issue.

Operators should note that other chemicals that could subject treatment plants to Section 112 (r) include:

Chemical	CAS Number	Threshold Quantity
anhydrous ammonia	7664-41-7	10,000 pounds
aqueous ammonia (concentration 20% or greater)	7664-41-7	20,000 pounds
sulfur dioxide (anhydrous)	7446-09-5	5,000 pounds
methane	74-82-8	10,000 pounds
propane	74-98-6	10,000 pounds

Please feel free to call me at 287-6188, or 1-800-789-9802, with any comments or questions. I can also be reached via e-mail at *brian.w.kavanah@state.me.us*.
Brian Kavanaugh

For Practice

1. Why should samples collected for BOD testing be collected before chlorination?
   a. Chlorine reacts with the buffer solution.
   b. Chlorine reacts with calcium ions
   c. Chlorine can kill the microbes that take up the oxygen in the BOD test.
   d. Chlorine interferes with algae growth.

2. A gasoline fire is best put out by adding
   a. Carbon dioxide
   b. Air
   c. Water
   d. Grease

3. A flow equalization tanks holds 30,000 gallons. What should the discharge from the tank be to ensure that the water in the tank is released evenly over a 12-hour period?
   a. 25 gpm
   b. 33 gpm
   c. 42 gpm
   d. 55 gpm

4. Colloidal particles are
   a. Particles that settle very rapidly.
   b. Particles that readily dissolve.
   c. Particles that settle after an hour.
   d. Particles that do not settle readily.

Y2K – The Millenium Bug

Elsewhere in this issue of the *O&M News* there is an article from EPA about the potential Y2K or Year 2000 problem. This problem may or may not affect you and your treatment plant but it's certainly better to find out about it now and put together an action plan than to wait and be caught short if there is a problem. Please read the enclosed sheet and start taking the recommended steps now so that you'll be prepared before December 31, 1999.

Certification News

The results of the fall exams have been sent those who took the exam. For those of you who passed, congratulations!! If you didn't pass this time, the Spring exam will be given on May 12, 1999 in the usual locations. Applications must be received by us on or before March 31, 1999 for you to be eligible to take the Spring exam. The following is a breakdown of the pass/fail rate for the Fall Exam.

Grade 1 Biological	25/41	61%
Grade 2 Biological	4/7	57%
Grade 3 Biological	11/24	46%
Grade 4 Biological	6/17	35%
Grade 5 Biological	3/20	15%
Grade 1 P/C	4/5	80%

Please note that those operators who have ***ODD*** certificate numbers are due for renewal on March 1st of 1999. Renewal notifications have been sent out. IF YOU HAVE AN ODD NUMBERED CERTIFICATE AND YOU DO NOT RECEIVE A RENEWAL NOTICE BY THE END OF JANUARY, CONTACT US IMMEDIATELY. If you don't receive your renewal notice and let your certification lapse, you could have problems down the road.

UPCOMING TRAINING COURSES

January 21, 1999 in Auburn, ME, Care & Maintenance of Lab Equipment & Preparing for an NPDES Lab Inspection - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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January 27, 1999 in Rockland, ME, Trenching, Confined Space Entry & PPE - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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February 17, 1999 in Rumford, ME, Trenching, Confined Space Entry & PPE - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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February 18, 1999 in Old Orchard Brach, ME, Care & Maintenance of Lab Equipment & Preparing for an NPDES Lab Inspection - approved for 5 hours, sponsored by MRWA (207) 729-6569.

February 24, 1999 in Bingham, ME, Trenching, Confined Space Entry & PPE - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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March 3, 1999 in Eastport, ME, Trenching, Confined Space Entry & PPE - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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March 9, 1999 in Brunswick, ME, Using Computerized Spreadsheets in Wastewater Process Control - approved for 6.0 hours, sponsored by JETCC (207) 767-2539.

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March 10, 1999 in Madawaska, ME, Trenching, Confined Space Entry & PPE - approved for 5 hours, sponsored by MRWA (207) 729-6569.

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March 16, 1999 in Augusta, ME, Macerating Equipment and Grinder Pump Maintenance - approved for 6.0 hours, sponsored by JETCC (207) 767-2539.

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March 23, 1999 in Presque Isle, ME, Control Valves, Water Hammer, and VFD's - approved for 5.5 hours, sponsored by MRWA (207) 729-6569.

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March 24, 1999 in Auburn, ME, Control Valves, Water Hammer, and VFD's - approved for 5.5 hours, sponsored by MRWA (207) 729-6569.

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March 25, 1999 in Old Orchard Beach, ME, Control Valves, Water Hammer, and VFD's - approved for 5.5 hours, sponsored by MRWA (207) 729-6569.

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April 13, 1999 in Ellsworth, ME, Caring for your Lab Instruments and Interpreting you Laboratory Reports - approved for 6.0 hours, sponsored by JETCC (207) 767-2539.

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April 27, 1999 in Kittery, ME, Basic Process Control Tests for Activated Sludge Systems - approved for 6.0 hours, sponsored by JETCC (207) 767-2539.

*****

May 20, 1999 in Bangor, ME, Troubleshooting WWTP Operations - approved for 6.0 hours, sponsored by JETCC (207) 767-2539.

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Answers to *For Practice:*

1. c. Chlorine can kill the organisms that use the oxygen in the BOD bottle. Since the BOD test measures the amount of oxygen used by those organisms, killing them will cause the test to be inaccurate.

2. a. Carbon Dioxide extinguishes the fire by starving it of oxygen. Water should not be used because gasoline floats on water and can cause the fire to spread. Air or grease would actually increase the intensity of the fire.

3. c. 30,000 gallons/12 hours/60 mminutes/hour = 41.67 gallons/minute ≅ 42 gpm

4. d. Colloidal particles are almost the same density as water and, therefore, settle very, very slowly.